

What is claimed is:

1. A method for fabricating an integrated sash insulating glass unit, comprising:
providing a sash frame having a first mounting surface for a first glazing pane and a second mounting surface for mounting a second glazing pane substantially parallel to said first glazing pane, said first and second mounting surfaces being spaced apart to provide an insulating space between said first and second glazing panes with an evacuation opening communicating with said insulating space;

adhesively mounting said first glazing pane to said first mounting surface and said second glazing pane to said second mounting surface;

allowing air to exhaust through said evacuation opening as said insulating space is formed between said glazing panes; and

drawing a vacuum from said evacuation opening to draw the first and second glazing panes closer together after the panes have been mounted on their respective mounting surfaces.

2. A method in accordance with claim 1, wherein:

said glazing panes are mounted to their respective mounting surfaces using an adhesive sealant; and

said vacuum is drawn until edges of the glazing panes are at least partially embedded into the sealant.

3. A method in accordance with claim 1, comprising:

plugging said evacuation opening after said vacuum has been drawn.

4. A method in accordance with claim 1, comprising:

filling said insulating space with an insulating gas via said evacuation opening, after said vacuum has been drawn; and

plugging said evacuation opening after said gas filling step.

5. A method in accordance with claim 1, wherein:
said glazing panes are mounted to their respective mounting surfaces using an adhesive sealant;
stops are provided on said mounting surfaces to limit whet-out of said sealant; and
said vacuum is drawn until the glazing panes contact said stops.
6. A method in accordance with claim 5, comprising:
plugging said evacuation opening after said vacuum has been drawn.
7. A method in accordance with claim 5, comprising:
filling said insulating space with an insulating gas via said evacuation opening, after
said vacuum has been drawn; and
plugging said evacuation opening after said gas filling step.
8. A method in accordance with claim 1, comprising:
applying said glazing panes to their respective mounting surfaces using at least one
roller.
9. A method in accordance with claim 8, wherein a roll press with multiple
rollers is used to apply the glazing panes to their respective mounting surfaces.
10. A method in accordance with claim 8, wherein said at least one roller is used
to attach a glazing bead for at least one of the glazing panes.
11. A method in accordance with claim 10, wherein said glazing bead is attached
simultaneously with the mounting of the respective glazing pane to its respective mounting
surface.
12. A method in accordance with claim 10, wherein pressure from the at least one
roller is applied to the at least one glazing pane via the respective glazing bead.

13. A method in accordance with claim 1 wherein said evacuation opening comprises a hole or a breather tube.

14. A method for fabricating an integrated sash insulating glass unit, comprising:
providing a sash frame having a first mounting surface for a first glazing pane and a second mounting surface for mounting a second glazing pane substantially parallel to said first glazing pane, said first and second mounting surfaces being spaced apart to provide an insulating space between said first and second glazing panes;

mounting said first glazing pane to said first mounting surface via an adhesive sealant;
mounting said second glazing pane to said second mounting surface via an adhesive sealant; and

pressing surfaces of said first and second glazing panes adjacent their respective mounting surfaces into the respective adhesive sealant using at least one roller.

15. A method in accordance with claim 14, comprising:
providing stops on said mounting surfaces to limit whet-out of the sealant; and
pressing said surfaces of the glazing panes with said at least one roller to a point at which the glazing panes contact said stops.

16. A method in accordance with claim 14, wherein said at least one roller is used to attach a glazing bead for at least one of the glazing panes.

17. A method in accordance with claim 16, wherein said glazing bead is attached simultaneously with the mounting of the respective glazing pane to its respective mounting surface.

18. A method in accordance with claim 16, wherein pressure from the at least one roller is applied to the at least one glazing pane via the respective glazing bead.

19. A method in accordance with claim 14, wherein:
said glazing pane surfaces are pressed by the at least one roller via respective glazing beads; and
pressure applied to the glazing beads by said at least one roller attaches the glazing beads to the sash frame.
20. A method in accordance with claim 14, wherein a roll press with multiple rollers is used to apply the glazing panes to their respective mounting surfaces.
21. A method in accordance with claim 20, wherein said roll press simultaneously presses said surfaces of the first and second glazing panes toward their respective mounting surfaces.
22. A method in accordance with claim 20, wherein said roll press comprises successive roller sets that are spaced progressively closer together as said sash frame and glazing panes are transported therebetween.
23. A method in accordance with claim 14, wherein an evacuation opening is provided in communication with said insulating space, to allow the escape of air as said glazing panes are mounted to their respective mounting surfaces and pressed by said roll press.
24. A method in accordance with claim 23, comprising:
plugging said evacuation opening after said glazing panes have been mounted and pressed.
25. A method in accordance with claim 23, comprising:
filling said insulating space with an insulating gas via said evacuation opening, after said glazing panes have been mounted and pressed; and
plugging said evacuation opening after said gas filling step.